

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 LISTING OF CLAIMS

2 We claim:

3 1. (original) An environment aware message delivery system, comprising:

4 a portable message redirection agent carried by a user; and

5 a message delivery service manager for managing candidate message terminals to provide
6 message delivery services for the user, wherein when the user moving over to a place, said
7 message redirection agent cooperates with said message delivery service manager located in the
8 environment around the user to select a message terminal from candidate message terminals in
9 the environment as a target message terminal, and request a message redirection entity to redirect
10 the message addressed to the user to the target message terminal.

11 2. (original) A system according to claim 1, wherein said message redirection agent cooperates
12 with said message delivery service manager in the environment around the user by means of a
13 short range wireless communication network.

14 3. (original) A system according to claim 2, wherein said short range wireless communication
15 network is Bluetooth wireless communication network.

16 4. (original) A system according to claim 1, wherein said message redirection agent cooperates
17 with said message delivery service manager in the environment around the user by means of a
18 USB interface.

19 5. (original) A system according to claim 1, wherein said message redirection agent runs in
20 portable pervasive computing devices such as cell phone or PDA.

DOCKET NUMBER: CN920020005US1

-2/18-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 6. (original) A system according to claim 1, wherein said message redirection agent runs in Blue
2 badges.

3 7. (original) A system according to claim 1, wherein said message redirection entity is PBX.

4 8. (previously presented) An environment aware message delivery system, comprising:

5 a portable message redirection agent carried by a user; and

6 a message delivery service manager for managing candidate message terminals to provide
7 message delivery services for the user, wherein when the user moving over to a place, said
8 message redirection agent cooperates with said message delivery service manager located in the
9 environment around the user to select a message terminal from candidate message terminals in
10 the environment as a target message terminal, and request a message redirection entity to redirect
11 the message addressed to the user to the target message terminal, wherein said message
12 redirection agent comprises:

13 a message redirection service discoverer for sending service requests to said message delivery
14 service manager, and receiving service information from said message delivery service manager;

15 a message redirection manager for maintaining a message redirection service list, configuring
16 message redirection policy and selecting the target message terminal; and

17 a message redirection requester for requesting message redirection service from the message
18 redirection entity; and

19 wherein said message delivery service manager comprises:

20 a service request handler for authenticating the message redirection agent and sending service
21 information on-demand to the message redirection agent;

DOCKET NUMBER: CN920020005US1

-3/18-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 a service availability detector for checking the status of the candidate message terminals in the
2 environment and updating the message delivery service list according to the checking result; and
3 a message delivery service configurator for configuring the available message delivery services,
4 such as authorizing who can access these services.

5 9. (canceled)

6 10. (previously presented) A system according to claim 8, wherein said message delivery service
7 manager further comprises a service advertiser for periodically sending service information to
8 nearby message redirection agents.

9 11. (original) A system according of claim 1, wherein said message redirection agent comprises
10 a message redirection service discoverer for sending service requests to said message delivery
11 service manager.

12 12. (previously presented) A system according to claim 8, wherein said message redirection agent
13 comprises a message redirection service discoverer for sending service requests to said message
14 delivery service manager, and wherein said message delivery service manager comprises:

15 a service request handler for authenticating the message redirection agent;

16 a service availability detector for checking the status of the candidate message terminals in the
17 environment and updating the message delivery service list according to the checking result;

18 a message delivery service configurator for configuring the available message delivery services,
19 such as authorizing who can access these services, and selecting the target message terminal on
20 behalf of the message redirection agent making the service requests; and

DOCKET NUMBER: CN920020005US1

-4/18-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 a message redirection requester for requesting message redirection service from the message
2 redirection entity.

3 13. (currently amended) ~~A~~ An environment aware message delivery system according to claim 1,
4 comprising:

5 a portable message redirection agent carried by a user; and

6 a message delivery service manager for managing candidate message terminals to provide
7 message delivery services for the user, wherein when the user moving over to a place, said
8 message redirection agent cooperates with said message delivery service manager located in the
9 environment around the user to select a message terminal from candidate message terminals in
10 the environment as a target message terminal, and request a message redirection entity to redirect
11 the message addressed to the user to the target message terminal.
12 wherein said message redirection agent comprises:

13 a message redirection service discoverer for sending service requests to said message delivery
14 service manager, and receiving service information from said message delivery service manager;
15 and

16 a message redirection manager for maintaining message redirection service list, configuring the
17 message redirection policy and selecting the target message terminal.

18 14. (original) A system according to claim 13, wherein said message delivery service manager
19 comprises:

20 a service request handler for authenticating the message redirection agent and sending service
21 information on-demand to the message redirection agent;

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

- 1 a service availability detector for checking the status of the candidate message terminals in the
2 environment and updating the message delivery service list according to the checking result;
- 3 a message delivery service configurator for configuring the available message delivery services,
4 such as authorizing who can access these services; and
- 5 a message redirection requester for requesting message redirection service from the message
6 redirection entity according to the request of the message redirection agent.

7 15. (currently amended) A system according to claim 13 ~~claim 1~~, wherein said system comprises
8 a plurality of message delivery service managers, running in various message terminals
9 respectively.

10 16. (original) A system according to claim 15, wherein said message redirection agent comprises:

11 a message redirection service discoverer for sending service requests to said message delivery
12 service manager, and receiving service information from said message delivery service manager;

13 a message redirection manager for maintaining message redirection service list, configuring the
14 message redirection policy and selecting the target message terminal; and

15 a message redirection requester for requesting message redirection service from the message
16 redirection entity.

17 17. (original) A system according to claim 16, wherein said message delivery service manager
18 comprises a service request handler for authenticating the message redirection agent and sending
19 service information on-demand to the message redirection agent.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 18. (original) A system according to claim 17, wherein said message delivery service manager
2 further comprises a service advertiser for periodically sending message redirection service
3 information to nearby message redirection agents.

4 19. (original) A system according to claim 15, wherein said message redirection agent comprises:

5 a message redirection service discoverer for sending service requests to said message delivery
6 service manager, and receiving service information from said message delivery service manager;
7 and

8 a message redirection manager for maintaining message redirection service list, configuring the
9 message redirection policy and selecting the target message terminal.

10 20. (previously presented) A system according to claim 8, wherein said system comprises a
11 plurality of message delivery service managers, running in various message terminals
12 respectively, and wherein a message delivery service manager comprises:

13 a service request handler for authenticating the message redirection agent and sending service
14 information on-demand to the message redirection agent; and

15 a message redirection requester for requesting message redirection service from the message
16 redirection entity according to the request of the message redirection agent.

17 21. (original) An environment aware messages delivery method, comprising the steps of:

18 making information interaction with a message delivery service manager in the environment
19 around a user by a portable message redirection agent carried by the user, wherein interacted
20 information comprises information on candidate message terminals;

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 selecting a message terminal from the candidate message terminals in the environment as a target
2 message terminal; and

3 requesting a message redirection entity to redirect a message addressed to the user to the target
4 message terminal.

5 22. (original) A portable message redirection agent, characterized by:

6 when a user moves over to a place, said portable message redirection agent being carried by the
7 user cooperating with a message delivery service manager in the environment around the user,
8 selects a message terminal from candidate message terminals in an environment of the user, as a
9 target message terminal and requests a message redirection entity to redirect a message addressed
10 to the user to the target message terminal.

11 23. (currently amended) A message delivery service manager, comprising:

12 cooperating means functioning such that when a user moves over to a place and said message
13 delivery service manager is in an environment around the user, cooperates with a portable
14 message redirection agent carried by the user, selects a message terminal from candidate message
15 terminals in the environment as a target message terminal, and requests a message redirection
16 entity to redirect the message addressed to the user to the target message terminal.

17 24. (previously presented) An environment aware messages delivery method according to claim
18 21, further comprising the step of: providing an article of manufacture comprising a computer
19 usable medium having computer readable program code means embodied therein for causing
20 environment aware messages delivery, the computer readable program code means in said article
21 of manufacture comprising computer readable program code means for causing a computer to
22 effect the steps of making, selecting, and requesting.

23 25. (previously presented) An environment aware messages delivery method according to claim
24 21, further comprising the step of: providing a program storage device readable by machine,
25 tangibly embodying a program of instructions executable by the machine to perform method

DOCKET NUMBER: CN920020005US1

-8/18-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 steps for environment aware messages delivery, said method steps comprising the steps of
2 making, selecting, and requesting.

3 26. (previously presented) A computer program product comprising a computer usable medium
4 having computer readable program code means embodied therein for causing environment aware
5 messages delivery, the computer readable program code means in said computer program product
6 comprising computer readable program code means for causing a computer to effect the
7 functions of:

8 a portable message redirection agent carried by a user; and

9 a message delivery service manager for managing candidate message terminals to provide
10 message delivery services for the user, wherein when the user moving over to a place, said
11 message redirection agent cooperates with said message delivery service manager located in the
12 environment around the user to select a message terminal from candidate message terminals in
13 the environment as a target message terminal, and request a message redirection entity to redirect
14 the message addressed to the user to the target message terminal.

15 27. (previously presented) A message delivery service manager according to claim 23, further
16 comprising computer program product means comprising a computer usable medium having
17 computer readable program code means embodied therein for causing message delivery service
18 management, the computer readable program code means in said computer program product
19 comprising computer readable program code means for causing a computer to effect the
20 functions of the cooperating means.